

## AMENDMENTS TO THE CLAIMS

1. (Currently amended) A process for purifying a phosphodiesterase 1 (PDE-1) from a cell including heating an extract of a cell formed from a solution including at least one divalent cation, to increase the specific activity of PDE-1 in the extract, wherein the concentration of the divalent cation is about [[10 to]] 50 mM.
2. (Original) A process according to claim 1 wherein the divalent cation is magnesium or calcium.
- 3-6. (Canceled)
7. (Original) A process according to claim 1 wherein the extract is heated to a temperature that permits depletion of phosphomonoesterase activity from the extract.
8. (Original) A process according to claim 7 wherein the extract is heated to less than 80°C.
9. (Original) A process according to claim 8 wherein the extract is heated to between about 45 and 75°C.
10. (Original) A process according to claim 9 wherein the extract is heated to about 60°C.
11. (Currently amended) A process for purifying PDE-1 from a barley cell including:  
releasing PDE-1 from the cell into a solution including about [[10 to]] 50 mM calcium and about [[10 to]] 50 mM magnesium to form an extract; and  
heating the extract to between about 45 to 70°C to increase the specific activity of PDE-1 in the extract.
12. (Currently amended) A process according to claim 11 wherein the extract is maintained in conditions for promoting ~~solubilisation~~ solubilization of the phosphodiesterase in the extract prior to heating the extract.

13. (Original) A process according to claim 12 wherein the extract is maintained at less than 10°C.

14. (Original) A process according to claim 13 wherein the extract is maintained at between 0 to about 4°C.

15. (Currently amended) A process according to claim 11 comprising the further step of:

~~utilising~~ utilizing chromatography to purify PDE-1 from the heated extract.

16. (Currently amended) A process according to claim 15 wherein anion exchange chromatography is ~~utilised~~ utilized to purify PDE-1 from the heated extract.

17-20. (Canceled)